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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,919	12/29/2003	Sriram R. Vangal	P17737	7058
	7590 11/09/200 YNES & VICTOR, LL	. EXAM	. EXAMINER	
ATTN: INT77 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			VU, VIET DUY	
			ART UNIT	PAPER NUMBER
			2154	
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			MAIL DATE	DELIVERY MODE
			11/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

:	Application No.	Amplicant(a)				
	Application No.	Applicant(s)				
Office Action Summer:	10/747,919	VANGAL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Viet Vu	2154				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with	n the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MAILING DOWN THE STATE OF THE MAILING DOWN	ATE OF THIS COMMUNIC, 36(a). In no event, however, may a repwill apply and will expire SIX (6) MONTH, cause the application to become ABA	ATION. lly be timely filed HS from the mailing date of this communication. NDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20 Second	eptember 2007.					
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL . 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-39 is/are pending in the application.						
4a) Of the above claim(s) 24-33 is/are withdraw	4a) Of the above claim(s) <u>24-33</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-23 and 34-39</u> is/are rejected.	6)⊠ Claim(s) <u>1-23 and 34-39</u> is/are rejected.					
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) <u>24-33</u> are subject to restriction and/or	election requirement.					
Application Papers						
9) ☐ The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached (Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 1	119(a)-(d) or (f).				
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents		olication No				
3. Copies of the certified copies of the prior	rity documents have been re	eceived in this National Stage				
application from the International Bureau	u (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	of the certified copies not re	eceived.				
Attachment(s)						
1) Notice of References Cited (PTO-892)		mmary (PTO-413) Mail Date				
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		ormal Patent Application				

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Non-Art Rejections:

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following claim limitations lack proper anticident basis:

In claim 10, line 1, "the DMA controller".

In claim 23, line 2, "the processing logic".

A typo error is also found in claim 16 where "pieplined" should be read --pipelined--. Correction is required.

Art Rejections:

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

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(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 4. Claims 1, 3-4, 11, 14 and 34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kagan, U.S. pat. No. 7,152,122.

Kagan discloses a network processor system comprising:

- a) a network interface and a host interface to receive a packet (see col 4, lines 12-19);
- b) a cache to store context data for the packet for multiple connections (col 4, lines 24-28);
- c) a processing engine to process the packet using context data in the cache (col 4, lines 20-23); and
- d) a DMA transfer queue (see col 9, lines 19-26).

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 2, 5-10, 12-13, 15-33 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagan in view of Boucher et al, U.S. pat. No. 6,247,060.

Per claims 2 and 20-22, <u>Kagan</u> does not explicitly teaching utilizing pipelined processor and working registers. The use of pipelined processor with various working registers in processing network packets is known in the art as disclosed by <u>Boucher</u> (see Boucher in col 17, lines 31-67).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize pipelined processor in Kagan because it would have enabled processing data packets more efficiently, i.e., in parallel.

Per claims 5-6 and 15, <u>Kagan</u> discloses a doorbell queue (<u>col 8</u>, <u>lines 52-65</u>), completion queue (<u>col 10</u>, <u>lines 1-9</u>) and address translator (<u>col 9</u>, <u>lines 26-31</u>). <u>Kagan</u> does not explicitly show a timer and an exception/event queue. The use of timer and exception/event queue in network processor for handling exceptions is also known in the art as shown by <u>Boucher</u> (see Boucher in col 58, lines 25-32).

Per claim 7, <u>Boucher</u> also teaches using a priority encoder (see col 19, lines 21-24).

Per claims 8-10, 12-13 and 23, <u>Kagan</u> does not explicitly show a DMA controller. Such prior art DMA controller is show by Boucher (see Boucher in col 5, lines 1-47).

Per claims 16-19 and 35-39, <u>Boucher</u> teaches loading/transferring instructions/data into appropriate instruction cache, working registers/queues in processing data packets (<u>see col 12</u>, <u>lines 54-67</u>; col 17, <u>lines 31-67</u> and col 19, <u>lines 21-51</u>).

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Conclusion:

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Vu whose telephone number is 571-272-3977. The examiner can normally be reached on Monday through Friday from 7:00am to 4:00pm. The Group general information number is 571-272-2100. The Group fax number is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on 571-272-1915.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VIET D. VU PRIMARY EXAMINER

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